



General

Guideline Title

Occupational therapy practice guidelines for mental health promotion, prevention, and intervention for children and youth.

Bibliographic Source(s)

Bazyk S, Arbesman M. Occupational therapy practice guidelines for mental health promotion, prevention, and intervention for children and youth. Bethesda (MD): American Occupational Therapy Association, Inc. (AOTA); 2013. 171 p. [315 references]

Guideline Status

This is the current release of the guideline.

Recommendations

Major Recommendations

Note from the National Guideline Clearinghouse: In addition to the evidence-based recommendations below, the guideline includes extensive information on the evaluation process and intervention strategies at each tier.

Definitions for the strength of recommendations (A–D, I) and levels of evidence (I–V) are provided at the end of the "Major Recommendations" field.

Recommendations for Occupational Therapy Interventions for Mental Health Promotion, Prevention, and Intervention for Children and Youth

	Recommended*	No Recommendation	Not Recommended
Tier I			
Social Skills Interventions			
	<ul style="list-style-type: none">• Whole-school and emotional learning programs to improve social and emotional skills (A)• After-school programs incorporating a goal of social skills to improve social behaviors and reduce problem behaviors (A)• School-based bullying prevention programs to prevent bullying and victimization (A)		

	<ul style="list-style-type: none"> • Problem-solving skills to improve coping behavior (A) • Problem-solving skills to improve peer interaction in preschool-age children (B) 	No Recommendation	Not Recommended
	<ul style="list-style-type: none"> • Parent education to improve child compliance (B) • Parent education as part of a multicomponent school program to prevent aggressive behaviors in at-risk kindergartners (B) 		
Health Promotion			
	<ul style="list-style-type: none"> • School-based stress management programs for Grades 3–8 to reduce stress and improve coping skills (A) • Mental health literacy programs for adolescents to improve knowledge and attitudes about mental illness (B) • Back education program for elementary school children to improve back posture when lifting objects and carrying backpacks (B) • Yoga to improve physical fitness and cardiorespiratory health (B or A) • Yoga to reduce negative behaviors in response to stress (C) 	<ul style="list-style-type: none"> • School-based programs to improve self-efficacy (I) 	
Play/Recreation/Leisure			
	<ul style="list-style-type: none"> • Participation in performing arts programs to improve social interaction and social skills (A) • Use of recreation facilitators in after-school programs to increase participation in physical activity (B) • Participation in performing arts programs to reduce emotional problems (B) • Team-building activities during physical education to improve self-concept (B) • Teaching cooperation skills in elementary school children to increase cooperation and reduce competitive behaviors (B) • Skill-based activity groups to reduce involvement with the legal system (C) • Skill-based activity groups to improve behavioral outcomes (I) 	<ul style="list-style-type: none"> • Bike repair program for adolescents to improve self-esteem and ability to work with others (I) 	
Tier II			
Social Skills			
	<ul style="list-style-type: none"> • Social skills training for disliked or rejected children and adolescents to improve social interaction, peer acceptance, and social standing (A) • Social skills programming for at-risk, aggressive, or antisocial children and adolescents to improve attention to tasks, peer interaction, and prosocial behaviors and to reduce aggressive, delinquent, and antisocial behaviors (A) • Social skills programming for children and adolescents with learning disabilities and attention-deficit hyperactivity disorder (ADHD) to improve communication and social and functional skills and reduce problem behaviors (A) • Social and life skills programs for children with intellectual impairments and developmental delays to improve life skills, conversation turn-taking, initiation of social interaction, self-management, and compliance, and to decrease problem 		

	Recommended behaviors (A) <ul style="list-style-type: none"> • Parenting programs for teenage mothers and their children to improve mother–infant interaction and parental attitudes and knowledge, maternal mealtime communication, self-confidence, and identity (A) 	No Recommendation	Not Recommended
Health Promotion			
	<ul style="list-style-type: none"> • Yoga for adolescents with irritable bowel syndrome to reduce gastrointestinal symptoms (A) • A program of yoga, massage, and relaxation for children with behavioral difficulties to improve self-confidence and increase communication (B) • A guided-imagery program combined with coping strategies for withdrawn or rejected first graders to increase socialization (B) • A multicomponent training program for children and adolescents with asthma to improve knowledge of asthma and internal locus of control and to decrease days off from school (B) • Yoga for youth with Type 2 diabetes to increase weight loss and self-esteem (C) • An activity-based group intervention for siblings of children with cancer to improve cancer-related knowledge, mood, and communication skills (C) 		
Play/Recreation/Leisure			
	<ul style="list-style-type: none"> • Play groups for abused or neglected children to improve play skills, self-esteem, and positive feelings and to reduce solitary play and behavior problems (A) • Play and music for children with intellectual and language impairments to improve social skills and attention to peers (A) • Recreation, leisure, and physical education programs for children and adolescents with intellectual disabilities to improve social interaction (A) • Structured recreation and activity program for children with extreme shyness to increase extraversion and decrease timidity (B) • Creative activities for children and early adolescents with peer difficulty to improve self-confidence in managing peer conflict (C) • Activity-based summer program for children with cleft lip and palate to improve social interaction (C) • Activity-based after-school program for children with identified behavior problems to improve self-concept (C) 		
Tier III			
Social Skills			
	<ul style="list-style-type: none"> • Social skills training for children and adolescents with autism spectrum disorder (ASD) to improve social behavior, social competence, and self-management (A) • LEGO® social skills group for children with ASD to reduce social difficulties and improve social interaction (A) 		

	Recommended	No Recommendation	Not Recommended
	<ul style="list-style-type: none"> • Social skills interventions for individuals with diagnosed mental illness and/or serious behavior disorders to improve social behaviors (A) • Friendship skills group for children with ASD to improve social skills (B) • Cognitive-behavioral therapy for children with ASD to reduce parent-reported anxiety (B) • Social communication intervention that includes joint attention for preschoolers with autism to improve language and adaptive behavior (B) • Cognitive-behavioral therapy and activities and games for children with ASD to improve assertive behavior and reduce hyperactivity and problem behaviors (C) • Video modeling or direct group instruction in social skills for children and adolescents with ASD to improve prosocial behaviors and social interactions (C) • Self-management strategies, change in instructional content, and differential reinforcement for children with ASD to reduce challenging behaviors (I) 		
Play/Recreation/Leisure			
	<ul style="list-style-type: none"> • Music-related activities (singing, listening to music, playing an instrument) for children with autism to improve nonverbal and verbal communication skills and reduce problem behaviors (A) • Wilderness experiences for adolescents with behavior disorders to improve cooperative behaviors (B) • Play activities for school-age children with autism to increase play and cooperative behaviors (I) • Use of a program to identify life mission (Instrumentalism in Occupational Therapy) for adolescents with emotional and behavioral difficulties to improve participation in occupations (I) 		

*The terminology used for the recommendations was language used in the article(s) from which the evidence was derived.

**Note: Criteria for levels of evidence are based on the standard language from the Agency for Healthcare Research and Quality (2009). Suggested recommendations are based on the available evidence and content experts' clinical expertise regarding the value of using the intervention in practice.

Definitions:

Strength of Recommendations

A–There is strong evidence that occupational therapy practitioners should routinely provide the intervention to eligible clients. Good evidence was found that the intervention improves important outcomes and concludes that benefits substantially outweigh harm.

B–There is moderate evidence that occupational therapy practitioners should routinely provide the intervention to eligible clients. At least fair evidence was found that the intervention improves important outcomes and concludes that benefits outweigh harm.

C–There is weak evidence that the intervention can improve outcomes, and the balance of the benefits and harms may result either in a recommendation that occupational therapy practitioners routinely provide the intervention to eligible clients or in no recommendation as the balance of the benefits and harm is too close to justify a general recommendation.

D–Recommend that occupational therapy practitioners do not provide the intervention to eligible clients. At least fair evidence was found that the intervention is ineffective or that harm outweighs benefits.

I—Insufficient evidence to determine whether or not occupational therapy practitioners should be routinely providing the intervention. Evidence that the intervention is effective is lacking, of poor quality, or conflicting and the balance of benefits and harm cannot be determined.

Levels of Evidence for Occupational Therapy Outcomes Research

Evidence Level	Definitions
I	Systematic reviews, meta-analyses, randomized controlled trials
II	Two groups, nonrandomized studies (e.g., cohort, case control)
III	One group, nonrandomized (e.g., before and after, pretest and posttest)
IV	Descriptive studies that include analysis of outcomes (e.g., single-subject design, case series)
V	Case reports and expert opinion that include narrative literature reviews and consensus statements

Note: Adapted from "Evidence-based medicine: What it is and what it isn't." D. L. Sackett, W. M. Rosenberg, J. A. Muir Gray, R. B. Haynes, & W. S. Richardson, 1996, *British Medical Journal*, 312, pp. 71-72. Copyright © 1996 by the British Medical Association. Adapted with permission.

Clinical Algorithm(s)

None provided

Scope

Disease/Condition(s)

- Positive mental health and well-being
- Mental health disorders or behavioral problems

Guideline Category

Counseling

Evaluation

Management

Prevention

Rehabilitation

Risk Assessment

Screening

Treatment

Clinical Specialty

Family Practice

Neurology

Pediatrics

Physical Medicine and Rehabilitation

Preventive Medicine

Psychiatry

Psychology

Intended Users

Advanced Practice Nurses

Allied Health Personnel

Health Care Providers

Health Plans

Managed Care Organizations

Nurses

Occupational Therapists

Patients

Physical Therapists

Physician Assistants

Physicians

Psychologists/Non-physician Behavioral Health Clinicians

Public Health Departments

Social Workers

Students

Utilization Management

Guideline Objective(s)

- To define the occupational therapy domain and process and interventions that occur within the boundaries of acceptable practice
- To help occupational therapists and occupational therapy assistants, as well as the individuals who manage, reimburse, or set policy regarding occupational therapy services, understand the contribution of occupational therapy in promoting mental health for children and youth ages 3 to 21
- To serve as a reference for teachers and other related services personnel, school principals and administrators, health care professionals, health care facility managers, education and health care regulators, third-party payers, and managed care organizations
- To present a public health model to envision and guide occupational therapy services in the promotion of mental health and prevention and intervention of mental ill health for school, community, and health care settings

Target Population

Children and youth ages 3 to 21 years, including children and youth with or without mental health or behavioral problems

Note: The occupational therapy process described in the original guideline document clearly differentiates service provision for three different tiers

specific to evaluation and intervention:

Tier 1: Universal Mental Health Promotion and Prevention Services – Services at this level are geared toward the entire population, including children and youth with or without mental health or behavioral problems, as well as with other disabilities and illnesses. At the universal level, the occupational therapy process focuses less on direct, individualized care and more on indirect services geared toward groups of children and youth.

Tier 2: Targeted Mental Health Services – Targeted interventions are designed to support children and youth who have learning, emotional, or life experiences that place them at risk of engaging in problematic behavior and/or developing mental health challenges.

Tier 3: Intensive Mental Health Services – Intensive individualized services are provided for children and youth with identified mental, emotional, or behavioral disorders that limit participation in needed and desired areas of occupational performance.

Interventions and Practices Considered

1. Evaluation for needed services at each tier
2. Universal mental health promotion and prevention services (tier 1)
 - Universal social skills programs
 - Universal health promotion programs
 - Universal play/recreation/leisure programs
3. Targeted mental health services (tier 2)
 - Targeted social skills interventions
 - Targeted health promotion interventions
 - Targeted play/recreation/leisure interventions
4. Intensive mental health services (tier 3)
 - Intensive social skills programs
 - Intensive play/recreation/leisure programs

Major Outcomes Considered

Effectiveness of activity-based occupational therapy interventions for mental health promotion, prevention and intervention:

- Peer and social interaction
- Compliance with adult directives and social rules and norms
- Participation in productive and task-focused behavior

Methodology

Methods Used to Collect/Select the Evidence

Hand-searches of Published Literature (Primary Sources)

Hand-searches of Published Literature (Secondary Sources)

Searches of Electronic Databases

Description of Methods Used to Collect/Select the Evidence

The following focused question was included in the review:

- What is the effectiveness of activity-based interventions for mental health promotion, prevention and intervention with children and youth?
The interventions include those focused on peer and social interaction; compliance with adult directives and social rules and norms; and participation in productive and task-focused behavior.

To conduct the evidence-based literature review, reviewers evaluated research studies published in the peer-reviewed scientific literature according

to their quality (scientific rigor and lack of bias) and levels of evidence. The evidence-based reviews incorporated into the American Occupational Therapy Association, Inc. (AOTA) Practice Guidelines consist of a review and ranking of the literature relevant to occupational therapy interventions published since 1980 used to treat a variety of clinical conditions. An initial review covered articles published between 1980 and 2002. An updated review included articles published between 2003 and 2009. In addition, more recent articles covering the period 2010 to 2012 were included on the basis of recommendations from content experts in the field. Specific inclusion criteria were as follows:

- The article was published either in a peer-reviewed journal or in a peer-reviewed evidence-based review since 1980 in the English language.
- The age range of study participants was 3 to 21 years.
- The intervention described in each study was embedded in activities and within the domain of occupational therapy, although it did not have to be a common occupational therapy intervention or administered by an occupational therapist or an occupational therapy assistant.
- The outcomes measured in the study included social or peer interactions or compliance with adult directives or social rules and norms.
- Level I, II, and III evidence (see the "Rating Scheme for the Strength of the Evidence" field).

Exclusion criteria were the following:

- Presentations and conference proceedings
- Non-peer-reviewed literature
- Dissertations and theses
- Study did not include an activity-based component
- Study was outside the scope of occupational therapy practice
- Level IV and V evidence

Reviewers and AOTA staff first identified search terms, and these were reviewed by the advisory group. The search terms were developed not only to capture pertinent articles but also to make sure that the terms relevant to the specific thesaurus of each database were included. Table B.2 in the original guideline document lists the search terms related to populations and interventions included in each systematic review. For the updated review, additional search terms were added to reflect changes in terminology that had taken place since the earlier review. Search terms for the updated reviews were developed by the consultant to the AOTA Evidence-Based Practice Project and AOTA staff in consultation with the author of the questions and were reviewed by the advisory group. A medical research librarian with experience in completing systematic review searches conducted all updated searches.

The following sources were searched:

- Bibliographic databases (MEDLINE, ERIC, EMBASE, PsycINFO; OTseeker was included in the updated review)
- Consolidated information sources (e.g., evidence-based medicine reviews, including the Cochrane Database of Systematic Reviews, the Cochrane Controlled Trials Register, and the Database of Abstracts of Reviews of Effectiveness)

The AOTA consultant completed the initial review of the database results. The updated review was completed by an academic partnership of Susan Nochajski and master's students in occupational therapy at the University at Buffalo, State University of New York. The team of reviewers also scanned the bibliographies of selected key articles.

Number of Source Documents

A total of 124 articles were included in the earlier and updated reviews.

Methods Used to Assess the Quality and Strength of the Evidence

Weighting According to a Rating Scheme (Scheme Given)

Rating Scheme for the Strength of the Evidence

Levels of Evidence for Occupational Therapy Outcomes Research

Evidence Level	Definitions
I	Systematic reviews, meta-analyses, randomized controlled trials

Evidence Level	Definitions
I	Randomized, nonrandomized studies (e.g., cohort, case control)
II	One group, randomized (e.g., before and after, pretest and posttest)
III	One group, nonrandomized (e.g., before and after, pretest and posttest)
IV	Descriptive studies that include analysis of outcomes (e.g., single-subject design, case series)
V	Case reports and expert opinion that include narrative literature reviews and consensus statements

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Methods Used to Analyze the Evidence

Review of Published Meta-Analyses

Systematic Review with Evidence Tables

Description of the Methods Used to Analyze the Evidence

After the literature search, reviewers then evaluated the quality of the studies and ranked them using the evidence-based standards described in the "Rating Scheme for the Strength of the Evidence" field."

The teams working on the focused question reviewed the articles according to their quality and levels of evidence. Each article included in the review then was abstracted using an evidence table that provides a summary of the methods and findings of the article and an appraisal of the strengths and weaknesses of the study based on design and methodology. American Occupational Therapy Association, Inc. (AOTA) staff and the evidence-based practice project consultant reviewed the evidence tables to ensure quality control. All studies identified by the review are summarized in Appendix C of the original guideline document. (Readers are encouraged to read the full articles for more details.)

The articles included in the systematic review have several overarching limitations, including the following: small sample size; wide variation in interventions, diagnoses, and clinical conditions; wide variation in outcomes measured; and the use of self-report outcome measures. Depending on the level of evidence, there may have been a lack of randomization, lack of control group, and limited statistical reporting. A wide range of diagnoses and clinical conditions may have been included in meta-analyses and systematic reviews incorporated in these reviews.

Methods Used to Formulate the Recommendations

Expert Consensus

Description of Methods Used to Formulate the Recommendations

The evidence-based literature review undertaken for this Practice Guideline examined studies that evaluated the effects of activity-based intervention on peer and social interaction, compliance with adult directives and social rules and norms, or productive or task-focused behavior in individuals from ages 3 to 21 years at the universal, targeted, and intensive tiers. These topics were chosen by a consensus group of clinical experts, because it was felt that these areas were the most representative of the psychosocial components that predict participation in school and in the home and community. In other words, on the basis of expert opinion, children who were able to interact in peer and social environments and/or comply with adult directives and engage in task behavior were more likely to successfully participate in school and in the home and community environments.

Rating Scheme for the Strength of the Recommendations

Strength of Recommendations

A—There is strong evidence that occupational therapy practitioners should routinely provide the intervention to eligible clients. Good evidence was

found that the intervention improves important outcomes and concludes that benefits substantially outweigh harm.

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Cost Analysis

A formal cost analysis was not performed and published cost analyses were not reviewed.

Method of Guideline Validation

Peer Review

Description of Method of Guideline Validation

Not stated

Evidence Supporting the Recommendations

Type of Evidence Supporting the Recommendations

The type of supporting evidence is identified and graded for each recommendation (see the "Major Recommendations" field).

A total of 124 articles were included in the reviews. Seventy-seven of the articles (62%) were classified as Level I evidence, 27 of the articles (22%) were classified as Level II studies, and 20 (16%) were classified as Level III studies.

Table. Number of Articles in Each Tier at Each Level of Evidence						
	Evidence Level					
Review	I	II	III	IV	V	Total in Each Review
Tier 1	26	7	2	0	0	35
Tier 2	36	13	8	0	0	57
Tier 3	15	7	10	0	0	32
Total	77	27	20	0	0	124

Benefits/Harms of Implementing the Guideline Recommendations

Potential Benefits

These guidelines may be used to assist:

- Occupational therapists and occupational therapy assistants in communicating about their services to external audiences
- Other health care providers, teachers, families and caregivers, mental health providers, and program administrators in determining whether referral for occupational therapy services would be appropriate
- Third-party payers in determining the therapeutic need for occupational therapy
- Legislators, third-party payers, and administrators in understanding the professional education, training, and skills of occupational therapists and occupational therapy assistants
- Health and education planning teams in determining the developmental and educational need for occupational therapy
- Program developers, administrators, legislators, and third-party payers in understanding the scope of occupational therapy services
- Program evaluators and policy analysts in this practice area in determining outcome measures for analyzing the effectiveness of occupational therapy intervention
- Policy, education, and health care benefit analysts in understanding the appropriateness of occupational therapy services for mental health promotion in children and youth
- Occupational therapy educators in designing appropriate curricula that incorporate the role of occupational therapy for mental health promotion in children and youth

Potential Harms

It is important to consider the possibility that some well-meaning prevention efforts may be more harmful than beneficial to children who are overweight. Child obesity prevention programs and untested health education messages have the potential to further stigmatize children who are overweight. The majority of children who are overweight are well aware of their body size and are at risk of developing a poor body image. Negatively focused health messages (e.g., that emphasize the undesirability of being overweight) may lead students to feel worse about themselves. Professionals must carefully consider how prevention messages are framed in order to avoid the potential psychosocial (e.g., poor self-esteem) and physical health (e.g., binge dieting) consequences that can result.

Qualifying Statements

Qualifying Statements

- This guideline does not discuss all possible methods of care, and although it does recommend some specific methods in practice, the occupational therapist makes the ultimate judgment regarding the appropriateness of a given procedure in light of a specific client's circumstances and needs.
- This publication is designed to provide accurate and authoritative information in regard to the subject matter covered. It is sold or distributed with the understanding that the publisher is not engaged in rendering legal, accounting, or other professional service. If legal advice or other expert assistance is required, the services of a competent professional person should be sought.
- It is the objective of the American Occupational Therapy Association, Inc. (AOTA) to be a forum for free expression and interchange of ideas. The opinions expressed by the contributors to this work are their own and not necessarily those of the AOTA.

Implementation of the Guideline

Description of Implementation Strategy

An implementation strategy was not provided.

Implementation Tools

Patient Resources

Resources

For information about availability, see the *Availability of Companion Documents* and *Patient Resources* fields below.

Institute of Medicine (IOM) National Healthcare Quality Report Categories

IOM Care Need

Getting Better

Living with Illness

IOM Domain

Effectiveness

Patient-centeredness

Identifying Information and Availability

Bibliographic Source(s)

Bazyk S, Arbesman M. Occupational therapy practice guidelines for mental health promotion, prevention, and intervention for children and youth. Bethesda (MD): American Occupational Therapy Association, Inc. (AOTA); 2013. 171 p. [315 references]

Adaptation

Not applicable: The guideline was not adapted from another source.

Date Released

2013

Guideline Developer(s)

American Occupational Therapy Association, Inc. - Professional Association

Source(s) of Funding

American Occupational Therapy Association, Inc.

Guideline Committee

Not stated

Composition of Group That Authored the Guideline

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Financial Disclosures/Conflicts of Interest

The authors of this Practice Guideline have signed a Conflict of Interest statement indicating that they have no conflicts that would bear on this work.

Guideline Status

This is the current release of the guideline.

Guideline Availability

Electronic copies: Not available at this time.

Print copies: Available for purchase from The American Occupational Therapy Association (AOTA), Inc., 4720 Montgomery Lane, Bethesda, MD 20814, Phone: 1-877-404-AOTA (2682), TDD: 800-377-8555, Fax: 301-652-7711. This guideline can also be ordered online at the [AOTA Web site](#) .

Availability of Companion Documents

The following are available:

- Occupational therapy practice framework: domain and process. 2nd ed. 2008. Available to order from the [American Occupational Therapy Association \(AOTA\) Web site](#) .
- Mental health in children and youth: the benefit and role of occupational therapy. Bethesda (MD): American Occupational Therapy Association, Inc. (AOTA); 2011. 2 p. Electronic copies: Available in Portable Document Format (PDF) from the [AOTA Web site](#) .

In addition, case studies are available in the original guideline document.

Patient Resources

A podcast titled "Mental Health in Children" is available from the [American Occupational Therapy Association \(AOTA\) Web site](#) .

Please note: This patient information is intended to provide health professionals with information to share with their patients to help them better understand their health and their diagnosed disorders. By providing access to this patient information, it is not the intention of NGC to provide specific medical advice for particular patients. Rather we urge patients and their representatives to review this material and then to consult with a licensed health professional for evaluation of treatment options suitable for them as well as for diagnosis and answers to their personal medical questions. This patient information has been derived and prepared from a guideline for health care professionals included on NGC by the authors or publishers of that original guideline. The patient information is not reviewed by NGC to establish whether or not it accurately reflects the original guideline's content.

NGC Status

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